



# UNITED STATES PATENT AND TRADEMARK OFFICE

ST  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,760	08/01/2003	Jeffrey Thramann	49272.830001.US3	5040
26582	7590	02/09/2005		
HOLLAND & HART, LLP 555 17TH STREET, SUITE 3200 DENVER, CO 80201			EXAMINER STOKES, CANDICE CAPRI	
			ART UNIT 3732	PAPER NUMBER

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/632,760	THRAMANN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Candice C. Stokes	3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 12 November 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 21-41 is/are pending in the application.
  - 4a) Of the above claim(s) 1-20 and 42-49 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 21-23,25,26 and 30-41 is/are rejected.
- 7) Claim(s) 24 and 27-29 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 17 February 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/17/03, 4/04&amp; 12/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Claims 21-41 in the reply filed on 11/12/04 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1) Claims 21-23 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Riccitelli et al (USPN 6,565,303). Riccitelli et al disclose a screw back out prevention device comprising a bushing 10 having an inner edge forming a gap through which a screw 14 can be threaded as shown in Fig. 1. The device also comprises at least one elastically-loaded pin 40. Further the bushing 10 is capable of residing between the head of the screw and a plate. "A plurality of pins 40 are positioned on the bottom surface around the opening" or gap "so that when a securing member is inserted into the opening, the pins, or a portion thereof, engage the shaft 15 of the screw 14". "However, when the back out force is applied to the screw, a force is applied to the tops of the pins, and, due to the angled configuration of the pins, the pins are

pulled inward, towards the screw, which is arrangement resists the back out force applied by the screw" (cols. 3-4, lns. 63-64,66-67 & 5-10).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1) Claims 30-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terrizzi et al (USPN 5,407,312) in view of Lyon (USPN 2,409,638). Terrizzi et al disclose a back out prevention device comprising a screw 10 with head 12 and shank 14 and a bonding material. Lyon teaches bushing 5. Screw 10 in combination with bushing 5 is capable of being threaded into a vertebral body. "More particularly, in prior art efforts to optimize the relationship of a fastener relative to a medium intended to be fastened, thereby, it is typical to provide, either into a recess of such medium or by physical adhesion onto the shank or head of the fastener itself, one or more types of solid or semi-solid phase pressure responsive function facilitating materials such as bonding agents, sealing agents such as caulking compounds, friction reduction agents such as lubricants, resilience-providing agents and combinations thereof" (col. 1, lines 15-24). Further Terrizzi et al discloses "concentric channel 22 may simply be filled with a solidified caulking compound which, responsive to the application of pressure thereupon during the

process of tightening head 12 into the medium to be fastened, an effective change of state, from solid to that of a putty-or gel-like state will occur, thereby depositing an effective quantity of sealing agent to the fastener-medium interface" (col. 2, lines 45-52). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the bushing as taught by Lyon into the screw and sealing agent disclosed by Terrizzi et al in order to more securely lock the screw to the plate and prevent the screw from backing out once fastened.

*Allowable Subject Matter*

Claims 24 and 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Candice C. Stokes whose telephone number is (571) 272-4714. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Ccs*  
Candice C. Stokes

*Cary E. O'Connor*  
Cary E. O'Connor  
Primary Examiner